HW#65: Introduction to simplifying radicals

Geometry

Due: Monday, Jan 11th

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Failure to show all work will result in LaSalle.

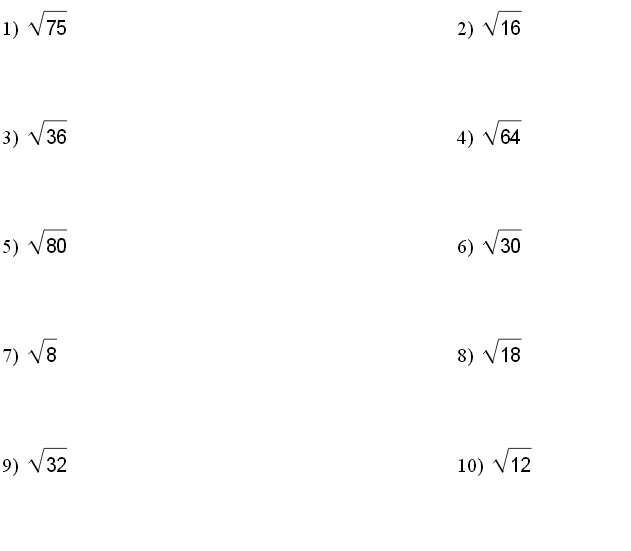
**Numbers-**

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| Perfect Squares | Example of Simplifying | Practice: Simplify the following  *(see examples to the left)* |
| = | Example 1:  Example 2:  Taking the square root of a number is… |  |
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**Pythagorean Theorem Application:**

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| 1) The sides of an equilateral triangle are 6 inches.  (a) Draw a picture of the triangle. (label the sides and angles)  (b) Can you find the area? What must be true about the base and the height?  (c) Add in a line to help you find the area. (the height)  (d) Use Pythagorean theorem to solve for the height.  (e) Find the area of the triangle. |

2) Circle the problems that are not perfect squares. Solve the problems that are perfect squares.



3) **Review problem**. Use the toothpicks!

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|  | Draw the next figure: |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Figure Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | Number of Toothpicks |  |  |  |  |  |  |  |  |  |  | | |
| Equation: | |